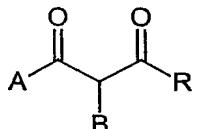


CLAIMS

1. Derivatives of 1,3-diones having general formula (I):



5

(I)

wherein:

- A represents:

10 an aryl group optionally substituted by one or more substituents selected from halogen, NO_2 , CN, CHO, OH, linear or branched $\text{C}_1\text{-C}_6$ alkyl, linear or branched $\text{C}_1\text{-C}_6$ haloalkyl, linear or branched $\text{C}_1\text{-C}_6$ alkoxy, linear or branched $\text{C}_1\text{-C}_6$ haloalkoxy, $\text{C}_1\text{-C}_6$ cyanoalkyl, $\text{C}_2\text{-C}_6$ 15 alkoxyalkyl, $\text{C}_2\text{-C}_6$ alkylthioalkyl, $\text{C}_2\text{-C}_6$ alkylsulfinylalkyl, $\text{C}_2\text{-C}_6$ alkylsulfonylalkyl, $\text{C}_2\text{-C}_6$ haloalkoxyalkyl, $\text{C}_2\text{-C}_6$ haloalkylthioalkyl, $\text{C}_2\text{-C}_6$ haloalkylsulfinylalkyl, $\text{C}_2\text{-C}_6$ haloalkylsulfonylalkyl, $\text{C}_2\text{-C}_6$ alkoxyalkoxy or $\text{C}_2\text{-C}_6$ haloalkoxyalkoxy 20 optionally substituted with a group selected from $\text{C}_1\text{-C}_4$ alkoxy or $\text{C}_1\text{-C}_4$ haloalkoxy, $\text{C}_2\text{-C}_6$ alkylthioalkoxy, $\text{C}_2\text{-C}_6$ haloalkylthioalkoxy, $\text{C}_3\text{-C}_{12}$ dialkoxyalkyl, $\text{C}_3\text{-C}_{12}$ dialkylthioalkyl, $\text{C}_3\text{-C}_{12}$ dialkylthioalkoxy, $\text{C}_3\text{-C}_{12}$ dialkoxyalkoxy, $\text{C}_2\text{-C}_6$

haloalkoxyhaloalkoxyl, C_3 - C_{10} alkoxyalkoxyalkyl, C_2 - C_6 alkenyl, C_2 - C_6 haloalkenyl, C_2 - C_6 alkenyloxy, C_2 - C_6 haloalkenyloxy, C_3 - C_8 alkenyloxyalkoxyl, C_3 - C_8 haloalkenyloxyalkoxyl, C_2 - C_6 alkynyl, C_2 - C_6

5 haloalkynyl, C_2 - C_6 alkynyloxy, C_2 - C_6 haloalkynyloxy, C_3 - C_8 alkynyloxyalkoxyl, C_3 - C_8 haloalkynyloxyalkoxyl, C_3 - C_{12} acylaminoalkoxy, C_2 - C_8 alkoxyiminoalkyl, C_2 - C_8 haloalkoxyiminoalkyl, C_3 - C_8 alkenyloxyiminoalkyl, C_3 - C_8 haloalkenyloxyiminoalkyl, C_3 - C_8

10 alkynyloxyiminoalkyl, C_3 - C_8 haloalkynyloxyiminoalkyl, C_5 - C_{10} alkoxyalkynyloxy, C_6 - C_{12} cycloalkylideneiminooxyalkyl, C_6 - C_{12} dialkylideneiminooxyalkyl, $-S(O)_mR_1$, $-OS(O)_tR_1$, $-SO_2NR_2R_3$, $-CO_2R_4$, $-COR_5$, $-CONR_6R_7$, $-CSNR_8R_9$, $15 -NR_{10}R_{11}$, $-NR_{12}COR_{13}$, $-NR_{14}CO_2R_{15}$, $-NR_{16}CONR_{17}R_{18}$, $-PO(R_{19})_2$, $-Q$, $-ZQ_1$, $-(CR_{20}R_{21})_pQ_2$, $-Z(CR_{22}R_{23})_pQ_3$, $-(CR_{24}R_{25})_pZQ_4$, $-(CR_{26}R_{27})_pZ(CR_{28}R_{29})_qQ_5$, $-(CR_{30}R_{31})_pZ(CR_{32}R_{33})_qZ_1Q_6$, $-Z_2(CR_{34}R_{35})_p(C=Y)T$, $-Z_3(CR_{36}R_{37})_v(CR_{38}R_{39}=CR_{40}R_{41})(C=Y)T$;

20 or it represents a heterocyclic group selected from pyridyl, pyrimidyl, quinolinyl, pyrazolyl, thiazolyl, oxazolyl, thienyl, furyl, benzothienyl, dihydrobenzothienyl, benzofuranyl, dihydrobenzofuranyl, benzoxazolyl, benzoxazolonyl, 25 benzothiazolyl, benzothiazolonyl, benzoimidazolyl,

benzoimidazolonyl, benzotriazolyl, chromanonyl, chromanyl, thiochromanonyl, thiochromanyl, 3a, 4-dihydro-3H-indeno[1,2-c]isoxazolyl, 3a, 4-dihydro-3H-chromeno[4,3-c]isoxazolyl, 5,5-dioxide-3a, 4-dihydro-5H-thiochromeno[4,3-c]isoxazolyl, 2,3,3a, 4-tetrahydrochromeno[4,3-c]pyrazolyl, 6,6-dioxide-2,3-dihydro-5H-[1,4]dithiino[2,3-c]thiochromenyl, 5,5-dioxide-2,3,3a, 4-tetrahydrothiochromeno[4,3-c]pyrazolyl, 1',1'-dioxide-2',3'-dihydrospiro[1,3-dioxolano-2,4'-thiochromen]-yl, 1,1,4,4-tetraoxide-2,3-dihydro-1,4-benzodithiin-6-yl, 4,4-dioxide-2,3-dihydro-1,4-benzoxathiin-7-yl, 1,1-dioxide-3-oxo-2,3-dihydro-1,2-benzoisothiazol-5-yl, 4-(alkoxyimino)-1,1-dioxide-3,4-dihydro-2H-thiochromen-6-yl, 1,1-dioxide-4-oxo-3,4-dihydro-2H-thiochromen-6-yl, 2,3-dihydro-1,4-benzoxathiin-7-yl, with said groups optionally substituted by one or more substituents selected from halogen, NO₂, CN, CHO, OH, linear or branched C₁-C₆ alkyl, linear or branched C₁-C₆ haloalkyl, linear or branched C₁-C₆ alkoxy, linear or branched C₁-C₆ haloalkoxy, C₁-C₆ cyanoalkyl, C₂-C₆ alkoxyalkyl, C₂-C₆ alkylthioalkyl, C₂-C₆ alkylsulfinylalkyl, C₂-C₆ alkylsulfonylalkyl, C₂-C₆ haloalkoxyalkyl, C₂-C₆ haloalkylthioalkyl, C₂-C₆ haloalkylsulfinylalkyl, C₂-C₆ haloalkylsulfonylalkyl,

C_2-C_6 alkoxyalkoxyl or C_2-C_6 haloalkoxyalkoxyl
 optionally substituted with a group selected from C_1-C_4 alkoxy or C_1-C_4 haloalkoxyl, C_2-C_6 alkylthioalkoxyl, C_2-C_6 haloalkylthioalkoxyl, C_3-C_{12} 5 dialkoxyalkyl, C_3-C_{12} dialkylthioalkyl, C_3-C_{12} dialkylthioalkoxyl, C_3-C_{12} dialkoxyalkoxyl, C_2-C_6 haloalkoxyhaloalkoxyl, C_3-C_{10} alkoxyalkoxyalkyl, C_2-C_6 alkenyl, C_2-C_6 haloalkenyl, C_2-C_6 alkenyloxy, C_2-C_6 haloalkenyloxy, C_3-C_8 alkenyloxyalkoxyl, C_3-C_8 10 haloalkenyloxyalkoxyl, C_2-C_6 alkynyl, C_2-C_6 haloalkynyl, C_2-C_6 alkynyloxy, C_2-C_6 haloalkynyloxy, C_3-C_8 alkynyloxyalkoxyl, C_3-C_8 haloalkynyloxyalkoxyl, C_3-C_{12} acylaminoalkoxy, C_2-C_8 alkoxyiminoalkyl, C_2-C_8 haloalkoxyiminoalkyl, C_3-C_8 alkenyloxyiminoalkyl, C_3-15 C_8 haloalkenyloxyiminoalkyl, C_3-C_8 alkynyloxyiminoalkyl, C_3-C_8 haloalkynyloxyiminoalkyl, C_5-C_{10} C_3-C_8 alkoxyalkynyloxy, C_6-C_{12} cycloalkylideneiminooxyalkyl, C_6-C_{12} dialkylideneiminooxyalkyl, $-S(O)_mR_1$, $-OS(O)_tR_1$, 20 $-SO_2NR_2R_3$, $-CO_2R_4$, $-COR_5$, $-CONR_6R_7$, $-CSNR_8R_9$, $-NR_{10}R_{11}$, $-NR_{12}COR_{13}$, $-NR_{14}CO_2R_{15}$, $-NR_{16}CONR_{17}R_{18}$, $-PO(R_{19})_2$, $-Q$, $-ZQ_1$, $-(CR_{20}R_{21})_pQ_2$, $-Z(CR_{22}R_{23})_pQ_3$, $-(CR_{24}R_{25})_pZQ_4$, $-(CR_{26}R_{27})_pZ(CR_{28}R_{29})_qQ_5$, $-(CR_{30}R_{31})_pZ(CR_{32}R_{33})_qZ_1Q_6$, $-Z_2(CR_{34}R_{35})_p(C=Y)T$, 25 $-Z_3(CR_{36}R_{37})_v(CR_{38}R_{39}=CR_{40}R_{41})(C=Y)T$;

- B represents a D-(R_x)_n group;

- R represents a hydrogen atom, a linear or branched C₁-C₆ alkyl group, a linear or branched C₁-C₆ haloalkyl group, a C₃-C₆ cycloalkyl or C₄-C₁₂ cycloalkylalkyl group optionally substituted with halogen atoms or C₁-C₆ alkyl or C₁-C₆ thioalkyl or C₁-C₆ alkoxy or C₂-C₆ alkoxy carbonyl groups, C₂-C₆ alkenyl groups, C₂-C₆ alkynyl groups, the latter two groups, in turn, optionally substituted with halogen atoms, a 5 C₅-C₆ cycloalkenyl group optionally substituted with halogen atoms or C₁-C₆ alkyl groups, an aryl or arylalkyl group optionally substituted;

- R₁ and R₁₉ represent a C₁-C₆ alkyl group or a C₁-C₆ haloalkyl group, a C₃-C₆ cycloalkyl group, an aryl 10 group optionally substituted by one or more substituents selected from halogen, NO₂, CN, CHO, linear or branched C₁-C₆ alkyl, linear or branched C₁-C₆ haloalkyl, linear or branched C₁-C₆ alkoxy, linear or branched C₁-C₆ haloalkoxy, C₁-C₆ alkylsulfonyl, 15 C₂-C₆ alkoxy carbonyl;

- m is equal to 0, 1 or 2;

- t is equal to 1 or 2;

- R₂, R₃, R₆, R₇, R₈, R₉, R₁₀, R₁₁, R₁₇ and R₁₈, the same 20 or different, represent a hydrogen atom, a linear or branched C₁-C₆ alkyl group in turn optionally 25

substituted with halogen atoms, a C₁-C₆ alkoxy group, a C₃-C₆ cycloalkyl group, an arylalkyl group or an aryl group, said arylalkyl and aryl groups also optionally substituted by one or more substituents
5 selected from halogen, NO₂, CN, CHO, linear or branched C₁-C₆ alkyl, linear or branched C₁-C₆ haloalkyl, linear or branched C₁-C₆ alkoxy, linear or branched C₁-C₆ haloalkoxyl, C₁-C₆ alkylsulfonyl, C₂-C₆ alkoxy carbonyl, or they jointly represent a C₂-
10 C₅ alkylene group;

- R₄, R₅ and R₄₂ represent a hydrogen atom, a linear or branched C₁-C₆ alkyl group in turn optionally substituted with halogen atoms, a C₃-C₆ alkenyl group in turn optionally substituted with halogen atoms, a
15 Q₇ group, an arylalkyl group optionally substituted by one or more substituents selected from halogen, NO₂, CN, CHO, linear or branched C₁-C₆ alkyl, linear or branched C₁-C₆ alkoxy, linear or branched C₁-C₆ haloalkoxyl, C₁-C₆ alkylsulfonyl, C₂-C₆ alkoxy carbonyl;
20 - R₁₂, R₁₄ and R₁₆ represent a hydrogen atom, a linear or branched C₁-C₆ alkyl group in turn optionally substituted with halogen atoms, a C₃-C₆ cycloalkyl group, a C₁-C₆ alkoxy group, a C₁-C₆ haloalkoxyl
25 group;

- R_{13} and R_{15} represent a hydrogen atom, a linear or branched C_1-C_6 alkyl group in turn optionally substituted with halogen atoms, a C_3-C_6 alkenyl group in turn optionally substituted with halogen atoms, a 5 Q_7 , NH_2 , $NHCN$, $NHNH_2$, $NHOH$ group, an arylalkyl group optionally substituted by one or more substituents selected from halogen, NO_2 , CN , CHO , linear or branched C_1-C_6 alkyl, linear or branched C_1-C_6 haloalkyl, linear or branched C_1-C_6 alkoxy, linear 10 or branched C_1-C_6 haloalkoxy, C_1-C_6 alkylsulfonyl, C_2-C_6 alkoxy carbonyl;

- R_{20} , R_{21} , R_{22} , R_{23} , R_{24} , R_{25} , R_{26} , R_{27} , R_{28} , R_{29} , R_{30} , R_{31} , 15 R_{32} , R_{33} , R_{34} , R_{35} , R_{36} , R_{37} , R_{38} , R_{39} , R_{40} and R_{41} , the same or different, represent a hydrogen atom, a linear or branched C_1-C_6 alkyl group in turn 20 optionally substituted with halogen atoms, a C_1-C_6 alkoxy group, or the two groups attached to the same carbon atom can be joined to each other by C_2-C_5 alkylene groups, the alkylene groups can in turn be substituted with C_1-C_3 alkyl groups;

- Q , Q_1 , Q_2 , Q_3 , Q_4 , Q_5 , Q_6 and Q_7 represent an aryl group, a C_3-C_6 cycloalkyl group, a C_5-C_6 cycloalkenyl group, a heterocyclic group selected from triazolyl, triazolonyl, pyrazolyl, imidazolyl, imidazolidinonyl, 25 tetrazolyl, tetrazolonyl, isoxazolyl, furyl, thieryl,

pyrrolyl, pyrrolidinyl, pyrrolidinonyl, pyridyl,
pyrimidinyl, pyrimidinonyl, pyrazinyl, pyridazinyl,
oxazolyl, thiazolyl, oxadiazolyl, thiadiazolyl,
isothiazolyl, benzoxazolyl, benzothiazolyl,
5 isoxazolinyl, 1,3-dioxanyl, 1,4-dioxanyl, 1,3-
dioxolanyl, tetrahydropyranyl, oxethanyl, oxyranyl,
thiazolidinyl, oxazolidinyl, piperidinyl,
piperidinonyl, piperazinyl, morpholinyl, thiazinyl,
tetrahydrofuranyl, dioxazolyl,
10 tetrahydrofuroisoxazolyl, 2-oxa-3-
azabicyclo[3.1.0]hex-3-enyl,
said groups optionally substituted by one or more
substituents selected from halogen, NO₂, OH, CN, CHO,
linear or branched C₁-C₆ alkyl, linear or branched C₁-
15 C₆ haloalkyl, linear or branched C₁-C₆ alkoxy, linear
or branched C₁-C₆ haloalkoxy, C₁-C₆ cyanoalkyl, C₂-C₆
alkoxyalkyl, C₂-C₆ alkylthioalkyl, C₂-C₆
alkylsulfinylalkyl, C₂-C₆ alkylsulfonylalkyl, C₂-C₆
haloalkoxyalkyl, C₂-C₆ haloalkylthioalkyl, C₂-C₆
20 haloalkylsulfinylalkyl, C₂-C₆ haloalkylsulfonylalkyl,
C₂-C₆ alkoxyalkoxy or C₂-C₆ haloalkoxyalkoxy
optionally substituted with a group selected from C₁-
C₄ alkoxy or C₁-C₄ haloalkoxy, C₂-C₆
alkylthioalkoxy, C₂-C₆ haloalkylthioalkoxy, C₃-C₁₂
25 dialkoxyalkyl, C₃-C₁₂ dialkylthioalkyl, C₃-C₁₂

dialkylthioalkoxyl, C₃–C₁₂ dialkoxyalkoxyl, C₂–C₆
haloalkoxyhaloalkoxyl, C₃–C₁₀ alkoxyalkoxyalkyl, C₂–C₆
alkenyl, C₂–C₆ haloalkenyl, C₂–C₆ alkenyloxy, C₂–C₆
haloalkenyl, C₃–C₈ alkenyloxyalkoxyl, C₃–C₈
5 haloalkenyl, C₂–C₆ alkynyl, C₂–C₆
haloalkynyl, C₂–C₆ alkynyl, C₂–C₆ haloalkynyl, C₃–C₈
C₃–C₈ alkynyl, C₃–C₈ haloalkynyl, C₃–C₁₂ acylaminoalkoxy, C₂–C₈ alkoxyiminoalkyl, C₂–C₈
haloalkoxyiminoalkyl, C₃–C₈ alkenyloxyiminoalkyl, C₃–
10 C₈ haloalkenyl, C₃–C₈
alkynyl, C₃–C₈ haloalkynyl, C₃–C₈ haloalkynyl, C₅–C₁₀ alkoxalkynyl, C₆–C₁₂
cycloalkylideneiminooxyalkyl, C₆–C₁₂
dialkylideneiminooxyalkyl, aryl optionally
15 substituted, –S(O)_mR₁, –OS(O)_tR₁, –SO₂NR₂R₃,
–CO₂R₄, –COR₅, –CONR₆R₇, –CSNR₈R₉, –NR₁₀R₁₁,
–NR₁₂COR₁₃, –NR₁₄CO₂R₁₅, –NR₁₆CONR₁₇R₁₈, –PO(R₁₉)₂,
–Z₂(CR₃₄R₃₅)_p(C=Y)T, –Z₃(CR₃₆R₃₇)_v(CR₃₈R₃₉=CR₄₀R₄₁)(C=Y)T;
– Z, Z₁, Z₂ = O, S(O)_r;
20 – Y = O, S;
– r is equal to 0, 1 or 2;
– p, q are equal to 1, 2, 3 or 4;
– v is equal to 0 or 1;
– Z₃ = O, S or a direct bond;

- T represents a hydrogen atom, a Z_4R_{42} group, a - $NR_{43}R_{44}$ group, an aryl group or a heterocyclic group selected from triazolyl, triazolonyl, pyrazolyl, imidazolyl, imidazolidinonyl, tetrazolyl, 5 tetrazolonyl, pyrrolyl, pyrrolidinyl, pyrrolidinonyl, pyridyl, pyrimidinyl, piperidinyl, piperidinonyl, piperazinyl, morpholinyl, said groups optionally substituted by one or more substituents selected from halogen, NO_2 , OH , CN , CHO , linear or branched C_1-C_6 10 alkyl, linear or branched C_1-C_6 haloalkyl, C_3-C_6 cycloalkyl, C_5-C_6 cycloalkenyl, linear or branched C_1-C_6 alkoxy, linear or branched C_1-C_6 haloalkoxy, C_1-C_6 cyanoalkyl, C_2-C_6 alkoxyalkyl, C_2-C_6 alkylthioalkyl, C_2-C_6 alkylsulfinylalkyl, C_2-C_6 15 alkylsulfonylalkyl, C_2-C_6 haloalkoxyalkyl, C_2-C_6 haloalkylthioalkyl, C_2-C_6 haloalkylsulfinylalkyl, C_2-C_6 haloalkylsulfonylalkyl, - $S(O)_mR_1$;

- Z_4 = O, S or a direct bond;

- R_{43} and R_{44} , the same or different, represent a 20 hydrogen atom, a linear or branched C_1-C_6 alkyl group in turn optionally substituted with halogen atoms, a C_3-C_6 alkenyl group in turn optionally substituted with halogen atoms, a Q_7 group, an arylalkyl group optionally substituted by one or more substituents 25 selected from halogen, NO_2 , CN , CHO , linear or

branched C_1 - C_6 alkyl, linear or branched C_1 - C_6 haloalkyl, linear or branched C_1 - C_6 alkoxy, linear or branched C_1 - C_6 haloalkoxy, C_1 - C_6 alkylsulfonyl, C_2 - C_6 alkoxy carbonyl, or they jointly represent a C_2 -5 C_5 alkylene chain;

- D represents:

a heterocyclic group of the heteroaryl or heterocyclic type, in all the above cases the heterocycle can be mono or polycyclic and can be 10 connected to the rest of the structure either through one of its carbon atoms or, when possible, through one of its nitrogen atoms; or it represents a mono or polycyclic aryl group, in this latter case, the group can also be partially 15 saturated;

- R_x represents a substituent selected from hydrogen, halogen, NO_2 , CN , CHO , OH , linear or branched C_1 - C_6 alkyl, linear or branched C_1 - C_6 haloalkyl, linear or branched C_1 - C_6 alkoxy, linear or branched C_1 - C_6 20 haloalkoxy, C_1 - C_6 cyanoalkyl, C_2 - C_6 alkoxyalkyl, C_2 - C_6 alkylthioalkyl, C_2 - C_6 alkylsulfinylalkyl, C_2 - C_6 alkylsulfonylalkyl, C_2 - C_6 haloalkoxyalkyl, C_2 - C_6 haloalkylthioalkyl, C_2 - C_6 haloalkylsulfinylalkyl, C_2 - C_6 haloalkylsulfonylalkyl, C_2 - C_6 alkoxyalkoxy or C_2 -25 C_6 haloalkoxyalkoxy optionally substituted with a

group selected from C_1-C_4 alkoxyl or C_1-C_4
 haloalkoxyl, C_2-C_6 haloalkylthioalkoxyl, C_3-C_{12}
 dialkoxyalkyl, C_3-C_{12} dialkylthioalkyl, C_3-C_{12}
 dialkylthioalkoxyl, C_3-C_{12} dialkoxyalkoxyl, C_2-C_6
 5 haloalkoxyhaloalkoxyl, C_3-C_{10} alkoxyalkoxyalkyl, C_2-C_6
 alkenyl, C_2-C_6 haloalkenyl, C_2-C_6 alkenyloxy, C_2-C_6
 haloalkenyloxy, C_3-C_8 alkenyloxyalkoxyl, C_3-C_8
 haloalkenyloxyalkoxyl, C_2-C_6 alkynyl, C_2-C_6
 haloalkynyl, C_2-C_6 alkynyloxy, C_2-C_6 haloalkynyloxy,
 10 C_3-C_8 alkynyloxyalkoxyl, C_3-C_8 haloalkynyloxyalkoxyl,
 C_3-C_{12} acylaminoalkoxy, C_2-C_8 alkoxyiminoalkyl, C_2-C_8
 haloalkoxyiminoalkyl, C_3-C_8 alkenyloxyiminoalkyl, C_3-
 C_8 haloalkenyloxyiminoalkyl, C_3-C_8
 alkynyloxyiminoalkyl, C_3-C_8 haloalkynyloxyiminoalkyl,
 15 C_5-C_{10} alkoxyalkynyloxy, C_6-C_{12}
 cycloalkylideneiminooxyalkyl, C_6-C_{12}
 dialkylideneiminooxyalkyl, $-S(O)_mR_1$, $-OS(O)_tR_1$,
 $-SO_2NR_2R_3$, $-CO_2R_4$, $-COR_5$, $-CONR_6R_7$, $-CSNR_8R_9$,
 $-NR_{10}R_{11}$, $-NR_{12}COR_{13}$, $-NR_{14}CO_2R_{15}$, $-NR_{16}CONR_{17}R_{18}$,
 20 $-PO(R_{19})_2$, $-Q$, $-ZQ_1$, $-(CR_{20}R_{21})_pQ_2$, $-Z(CR_{22}R_{23})_pQ_3$,
 $-(CR_{24}R_{25})_pZQ_4$, $-(CR_{26}R_{27})_pZ(CR_{28}R_{29})_qQ_5$,
 $-(CR_{30}R_{31})_pZ(CR_{32}R_{33})_qZ_1Q_6$, $-Z_2(CR_{34}R_{35})_p(C=Y)T$,
 $-Z_3(CR_{36}R_{37})_v(CR_{38}R_{39}=CR_{40}R_{41})(C=Y)T$;
 if several R_x groups are present, these can be the
 25 same or different;

- n = 1-9;

excluding the following compounds having general formula (I) wherein A, B and R have the following meanings:

5 A=4-chlorophenyl, B=1-methylimidazol-2-yl, R=H;
A=4-nitrophenyl, B=1-(2-hydroxyethyl)-5-nitroimidazol-2-yl, R=H;
A=phenyl, B=1H-benzimidazol-2-yl, R=C₂H₅;
A=phenyl, B=4H-1-benzopyran-4-yl, R=CH₃;

10 A=4-nitrophenyl, B=3-(4-methylphenyl)-1,2,4-oxadiazol-5-yl, R=CH₃;
A=phenyl, B=4-chloro-2,5-dioxo-2,5-dihydro-1H-pyrrol-3-yl, R=CH₃;
A=phenyl, B=2-acetyl-1,2,3,4-tetrahydroisoquinolin-1-yl, R=C₂H₅;

15 A=2-hydroxy-4-methoxyphenyl, B=thiazol-4-yl, R=CH₃;
A=phenyl, B=2,5-diphenyl-1,3-oxathiol-2-yl, R=CH₃;
A=4-nitrophenyl, B=4,6-bis(dimethylamino)-1,3,5-triazin-2-yl, R=CH₃;

20 A=phenyl, B=furan-2-yl, R=CH₃;
A=phenyl, B=1,3-dithian-2-yl, R=CH₃;
A=phenyl, B=4-chlorothien-2-yl, R=H;
A=phenyl, B=5-bromothien-2-yl, R=H;
A=phenyl, B=5-methylthien-2-yl, R=H;

25 A=phenyl, B=6-phenylpyrazin-2-yl, R=CH₃;

A=phenyl, B=3,4-dihydro-3-methyl-2-oxo-2H-1,3-benzoxazin-4-yl, R=CH₃;

A=phenyl, B=benzothiazol-2-yl, R=CH₃;

A=2-hydroxy-4-methoxyphenyl, B=2-phenylthiazol-4-yl,

5 R=CH₃;

A=phenyl, B=5-methylfuran-2-yl, R=CH₃;

A=phenyl, B=3-(4-methylphenyl)-1,2,4-oxadiazol-5-yl,
R=CH₃;

A=phenyl, B=tetrahydrofuran-2-yl, R=CH₃;

10 A=phenyl, B=2,3-dihydro-3-hydroxy-2-oxo-1H-indol-3-yl, R=CH₃,

A=phenyl, B=4-chloro-1-methyl-2,5-dioxo-2,5-dihydro-pyrrol-3-yl, R=CH₃;

A=phenyl, B=2-trifluoroacetyl-1,2,3,4-tetrahydroiso-
15 quinolin-1-yl, R=C₂H₅;

A=phenyl, B=2-acetyl-1,2,3,4-tetrahydroisoquinolin-1-yl, R=CH₃;

A=4-nitrophenyl, B=2-(4-nitrophenyl)-3,5,6-triphenyl-pyridin-4-yl, R=CH₃;

20 A=phenyl, B=4,6-bis(dimethylamino)-1,3,5-triazin-2-yl, R=CH₃;

A=phenyl, B=4-methoxy-5-tert-butoxycarbonyl-1H-pyrro-2-yl, R=CH₃;

A=phenyl, B=1,3-dihydro-3-oxo-isobenzofuran-1-yl,

25 R=CH₃;

A=phenyl, B=(5-methoxycarbonylmethyl)thien-2-yl, R=H;
A=phenyl, B=4-methylthien-2-yl, R=H;
A=phenyl, B=1,4-dihydro-1-methyl-3-nitroquinolin-4-
yl, R=H;

5 A=phenyl, B=thien-2-yl, R=H;
A=phenyl, B=6-methylbenzothiazol-2-yl, R=CH₃;
A=2-methoxycarbonylphenyl, B=phenyl, R=CH₃;
A=2-benzylxy-4-methoxyphenyl, B=2, 3, 4-
trimethoxyphenyl, R=H;

10 A=4,5-dimethoxy-2-nitrophenyl, B=3,4-dimethoxyphenyl,
R=H;
A=2-nitrophenyl, B=phenyl, R=H;
A=2,4,5-trimethoxyphenyl, B=4-methoxyphenyl, R=H;
A=4-bromophenyl, B=phenyl, R=H;

15 A=4-bromophenyl, B=2,4-dinitrophenyl, R=CH₃;
A=4-chlorophenyl, B=phenyl, R=H;
A=2,4-dibenzylxy-5-methoxyphenyl, B=1,3-benzodioxol-
5-yl, R=H;

A=2,4-dibenzylxyphenyl, B=1,3-benzodioxol-5-yl, R=H;

20 A=4-methoxyphenyl, B=2-carboxyphenyl, R=H;
A=4-methylphenyl, B=2,4-dinitrophenyl, R=CH₃;
A=4-hydroxy-3-methoxyphenyl, B=4-hydroxy-3-
methoxyphenyl, R=H;

A=2-nitrophenyl, B=4-methylphenyl, R=H;

25 A=4-chlorophenyl, B=4-chlorophenyl, R=H;

A=2,4-diacetoxyphenyl, B=phenyl, R=CH₃;

A=3-methoxyphenyl, B=phenyl, R=C₂R₅;

A=4-nitrophenyl, B=phenyl, R=H;

A=2-nitrophenyl, B=4-n-butoxyphenyl, R=H;

5 A=2-nitro-4-chlorophenyl, B=4-methylphenyl, R=H;

A=phenyl, B=8-carboxynaphthalenyl, R=CH₃;

A=2,5-dimethoxyphenyl, B=2-hydroxyphenyl, R=C₂R₅;

A=4-fluorophenyl, B=2-nitro-4-trifluoromethylphenyl,
R=CH₃;

10 A=3-chloro-4-methylphenyl, B=2,4-dinitrophenyl,
R=CH₃;

A=2-nitro-4-chlorophenyl, B=phenyl, R=H;

A=4,5-dimethoxy-2-nitrophenyl, B=4-methylphenyl, R=H;

A=2-carboxy-6-nitrophenyl, B=phenyl, R=CH₃;

15 A=2,4,5-trimethoxyphenyl, B=3-methoxyphenyl, R=H;

A=phenyl, B=4-bromophenyl, R=H;

A=6-benzyloxy-2,3,4-trimethoxyphenyl, B=1,3-
benzodioxol-5-yl, R=H;

A=4,5-dimethoxy-2-nitrophenyl, B=4-methoxyphenyl,

20 R=H;

A=4,5-dimethoxy-2-nitrophenyl, B=4-chlorophenyl, R=H;

A=2,4-dibenzyloxyphenyl, B=4-methoxyphenyl, R=H;

A=4-methylphenyl, B=4-methylphenyl, R=H;

A=4-dimethylaminophenyl, B=phenyl, R=H;

25 A=4-methoxyphenyl, B=phenyl, R=H;

A=4,5-dichloro-2-nitrophenyl, B=4-chlorophenyl, R=H;
A=2-nitrophenyl, B=4-methoxyphenyl, R=H;
A=phenyl, B=2,5-dimethoxycarbonylaminophenyl, R=CH₃;
A=4-hydroxy-4-methoxyphenyl, B=2-methoxyphenyl, R=H;
5 A=phenyl, B=4-methylphenyl, R=H;
A=2-nitrophenyl, B=4-ethoxyphenyl, R=H;
A=2-nitro-4-chlorophenyl, B=4-methoxyphenyl, R=H;
A=4-chlorophenyl, B=phenyl, R=C₂H₅;
A=2-t-butoxycarbonyl-5-ethyl-4-methoxyphenyl, B=2,3-
10 dihydro-7-methyl-1,4-benzodioxin-6-yl, R=t-butyl;
A=phenyl, B=2-nitro-4-trifluoromethylphenyl, R=CH₃;
A=3,4-dichlorophenyl, B=2,4-dinitrophenyl, R=CH₃;
A=4,5-dichloro-2-nitrophenyl, B=4-methoxyphenyl, R=H;
A=4-methoxy-2-nitrophenyl, B=4-methylphenyl, R=H;
15 A=phenyl, B=anthracene-9-yl, R=CH₃;
A=phenyl, B=4-methoxyphenyl, R=H;
A=2,4,5-trimethoxyphenyl, B=phenyl, R=H;
A=2,4-diacetoxyphenyl, B=2,4,5-trimethoxyphenyl,
R=CH₃;
20 A=2-hydroxyphenyl, B=phenyl, R=H;
A=4-methoxy-2-nitrophenyl, B=phenyl, R=H;
A=4,5-dimethoxy-2-nitrophenyl, B=phenyl, R=H;
A=2,4-dinitrophenyl, B=phenyl, R=CH₃;
A=phenyl, B=phenyl, R=CH₃;
25 A=phenyl, B=4-dimethylaminophenyl, R=H;

A=phenyl, B=2,4-dinitrophenyl, R=CH₃;
A=4,5-dichloro-2-nitrophenyl, B=4-methylphenyl, R=H;
A=4-bromophenyl, B=phenyl, R=CH₃;
A=2-(4-methylphenylsulfonyloxy)-6-methoxyphenyl,
5 B=phenyl, R=H;
A=4-methylsulfonylphenyl, B=2-methoxyphenyl, R=CH₃;
A=4-methoxyphenyl, B=4-methoxyphenyl, R=CH₃;
A=phenyl, B=4-chlorophenyl, R=H;
A=2-nitrophenyl, B=4-nitrophenyl, R=H;
10 A=phenyl, B=phenyl, R=H;
A=2,4-dimethoxyphenyl, B=4-methoxyphenyl, R=H;
A=2-nitrophenyl, B=4-n-hexyloxyphenyl, R=H;
A=4-methoxy-2-nitrophenyl, B=4-methoxyphenyl, R=H;
A=phenyl, B=9-carboxyphenanthren-10-yl, R=CH₃;
15 A=phenyl, B=phenyl, R=CH₃;
A=3,4-dimethoxyphenyl, B=3,4-dimethoxyphenyl, R=H;
A=2,4-dimethoxyphenyl, B=phenyl, R=H;
A=phenyl, B=2-hydroxy-3,4,6-trimethyl-5-
methoxyphenyl, R=CH₃;
20 A=4-chloro-2-nitrophenyl, B=4-chlorophenyl, R=H;
A=2-nitrophenyl, B=4-chlorophenyl, R=H;
A=2,4,5-trimethoxyphenyl, B=3,4-dimethoxyphenyl, R=H;
A=4-chlorophenyl, B=2,4-dinitrophenyl, R=CH₃;
A=4,5-dichloro-2-nitrophenyl, B=phenyl, R=H;
25 A=4-methoxyphenyl, B=phenyl, R=CH₃;

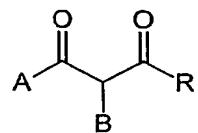
A=2,4-dibenzylxyloxyphenyl, B=3,4-dimethoxyphenyl, R=H;
 A=4-methylthiophenyl, B=4-methoxyphenyl, R=CH₃;
 A=phenyl, B=phenyl, R=C₂H₅;
 A=4-methoxyphenyl, B=2,4-dinitrophenyl, R=CH₃;

5 A=2-nitrophenyl, B=3-chlorophenyl, R=H;
 A=2-nitrophenyl, B=3,4-dimethoxyphenyl, R=H;
 A=4-methoxyphenyl, B=4-methoxyphenyl, R=H;
 A=2-hydroxyphenyl, B=4-methoxyphenyl, R=H;
 A=phenyl, B=2,5-bis (phenacylamino)phenyl, R=CH₃;

10 A=4-nitrophenyl, B=4-methylphenyl, R=H;
 A=2-nitrophenyl, B=4-n-pentyloxyphenyl, R=H;
 A=4-methoxy-2-nitrophenyl, B=4-chlorophenyl, R=H;
 A=phenyl, B=2-carboxynaphthalen-1-yl, R=CH₃.

2. The derivatives according to claim 1,
 15 characterized in that the compound having formula (I)
 are present as tautomeric and/or isomeric forms, pure
 or as blends of tautomeric and/or isomeric forms, in
 any proportion whatsoever.

3. Use of derivatives of 1,3-diones having
 20 general formula (I):



(I)

wherein:

- A represents:
an aryl group optionally substituted by one or more substituents selected from halogen, NO₂, CN, CHO, OH,
5 linear or branched C₁-C₆ alkyl, linear or branched C₁-C₆ haloalkyl, linear or branched C₁-C₆ alkoxy, linear or branched C₁-C₆ haloalkoxy, C₁-C₆ cyanoalkyl, C₂-C₆ alkoxyalkyl, C₂-C₆ alkylthioalkyl, C₂-C₆ alkylsulfinylalkyl, C₂-C₆ alkylsulfonylalkyl, C₂-C₆
10 haloalkoxyalkyl, C₂-C₆ haloalkylthioalkyl, C₂-C₆ haloalkylsulfinylalkyl, C₂-C₆ haloalkylsulfonylalkyl, C₂-C₆ alkoxyalkoxy or C₂-C₆ haloalkoxyalkoxy possibly substituted with a C₁-C₄ alkoxy or C₁-C₄ haloalkoxy group, C₂-C₆ alkylthioalkoxy, C₂-C₆
15 haloalkylthioalkoxy, C₃-C₁₂ dialkoxyalkyl, C₃-C₁₂ dialkylthioalkyl, C₃-C₁₂ dialkylthioalkoxy, C₃-C₁₂ dialkoxyalkoxy, C₂-C₆ haloalkoxyhaloalkoxy, C₃-C₁₀ alkoxyalkoxyalkyl, C₂-C₆ alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkenyloxy, C₂-C₆ haloalkenyloxy, C₃-C₈
20 alkenyloxyalkoxy, C₃-C₈ haloalkenyloxyalkoxy, C₂-C₆ alkynyl, C₂-C₆ haloalkynyl, C₂-C₆ alkynyloxy, C₂-C₆ haloalkynyloxy, C₃-C₈ alkynyloxyalkoxy, C₃-C₈ haloalkynyloxyalkoxy, C₃-C₁₂ acylaminoalkoxy, C₂-C₈ alkoxyiminoalkyl, C₂-C₈ haloalkoxyiminoalkyl, C₃-C₈
25 alkenyloxyiminoalkyl, C₃-C₈ haloalkenyloxyiminoalkyl,

C₃-C₈ alkynyloxyiminoalkyl, C₃-C₈
 haloalkynyloxyiminoalkyl, C₅-C₁₀ alkoxyalkynyloxy, C₆-C₁₂
 C₆-C₁₂ cycloalkylideneiminooxyalkyl, C₆-C₁₂
 dialkylideneiminooxyalkyl, -S(O)_mR₁, -OS(O)_tR₁,
 5 -SO₂NR₂R₃, -CO₂R₄, -COR₅, -CONR₆R₇, -CSNR₈R₉,
 -NR₁₀R₁₁, -NR₁₂COR₁₃, -NR₁₄CO₂R₁₅, -NR₁₆CONR₁₇R₁₈,
 -PO(R₁₉)₂, -Q, -ZQ₁, -(CR₂₀R₂₁)_pQ₂, -Z(CR₂₂R₂₃)_pQ₃,
 -(CR₂₄R₂₅)_pZQ₄, -(CR₂₆R₂₇)_pZ(CR₂₈R₂₉)_qQ₅,
 -(CR₃₀R₃₁)_pZ(CR₃₂R₃₃)_qZ₁Q₆, -Z₂(CR₃₄R₃₅)_p(C=Y)T,
 10 -Z₃(CR₃₆R₃₇)_v(CR₃₈R₃₉=CR₄₀R₄₁)(C=Y)T;
 or represents a heterocyclic group selected from
 pyridyl, pyrimidyl, quinolinyl, pyrazolyl, thiazolyl,
 oxazolyl, thienyl, furyl, benzothienyl,
 dihydrobenzothienyl, benzofuranyl,
 15 dihydrobenzofuranyl, benzoxazolyl, benzoxazolonyl,
 benzothiazolyl, benzothiazolonyl, benzoimidazolyl,
 benzoimidazolonyl, benzotriazolyl, chromanonyl,
 chromanyl, thiochromanonyl, thiochromanyl, 3a, 4-
 dihydro-3H-indeno[1,2-c]isoxazolyl, 3a, 4-dihydro-3H-
 20 chromeno[4,3-c]isoxazolyl, 5,5-dioxide-3a, 4-dihydro-
 3H-thiochromeno[4,3-c]isoxazolyl, 2,3,3a,4-
 tetrahydrochromeno[4,3-c]pyrazolyl, 6,6-dioxide-2,3-
 dihydro-5H-[1,4]dithiino[2,3-c]thiochromenyl, 5,5-
 dioxide-2,3,3a,4-tetrahydrothiochromeno[4,3-
 25 c]pyrazolyl, 1',1'-dioxide-2',3'-dihydrospiro[1,3-

dioxolane-2,4'-thiochromen]-yl, 1,1,4,4-tetraoxide-
2,3-dihydro-1,4-benzodithiin-6-yl 4,4-dioxide-2,3-
dihydro-1,4-benzoxathiin-7-yl, 1,1-dioxide-3-oxo-2,3-
dihydro-1,2-benzoisothiazol-5-yl, 4-(alkoxyimino)-
5 1,1-dioxide-3,4-dihydro-2H-thiochromen-6-yl, 1,1-
dioxide-4-oxo-3,4-dihydro-2H-thiochromen-6-yl, 2,3-
dihydro-1,4-benzoxathiin-7-yl,
with all these groups possibly substituted by one or
more substituents selected from halogen, NO₂, CN,
10 CHO, OH, linear or branched C₁-C₆ alkyl, linear or
branched C₁-C₆ haloalkyl, linear or branched C₁-C₆
alkoxyl, linear or branched C₁-C₆ haloalkoxyl, C₁-C₆
cyanoalkyl, C₂-C₆ alkoxyalkyl, C₂-C₆ alkylthioalkyl,
C₂-C₆ alkylsulfinylalkyl, C₂-C₆ alkylsulfonylalkyl,
15 C₂-C₆ haloalkoxyalkyl, C₂-C₆ haloalkylthioalkyl, C₂-C₆
haloalkylsulfinylalkyl, C₂-C₆ haloalkylsulfonylalkyl,
C₂-C₆ alkoxyalkoxyl or C₂-C₆ haloalkoxyalkoxyl,
possibly substituted with a C₁-C₄ alkoxy or C₁-C₄
haloalkoxyl group, C₂-C₆ alkylthioalkoxyl, C₂-C₆
20 haloalkylthioalkoxyl, C₃-C₁₂ dialkoxyalkyl, C₃-C₁₂
dialkylthioalkyl, C₃-C₁₂ dialkylthioalkoxyl, C₃-C₁₂
dialkoxyalkoxyl, C₂-C₆ haloalkoxyhaloalkoxyl, C₃-C₁₀
alkoxyalkoxyalkyl, C₂-C₆ alkenyl,
C₂-C₆ haloalkenyl, C₂-C₆ alkenyloxy, C₂-C₆
25 haloalkenyloxy, C₃-C₈ alkenyloxyalkoxyl, C₃-C₈

haloalkenyloxyalkoxyl, C_2-C_6 alkynyl, C_2-C_6
 haloalkynyl, C_2-C_6 alkynyloxy, C_2-C_6 haloalkynyloxy,
 C_3-C_8 alkynyloxyalkoxyl, C_3-C_8 haloalkynyloxyalkoxyl,
 C_3-C_{12} acylaminoalkoxy, C_2-C_8 alkoxyiminoalkyl, C_2-C_8
 5 haloalkoxyiminoalkyl, C_3-C_8 alkenyloxyiminoalkyl, C_3-
 C_8 haloalkenyloxyiminoalkyl, C_3-C_8
 alkynyloxyiminoalkyl, C_3-C_8 haloalkynyloxyiminoalkyl,
 C_5-C_{10} alkoxyalkynyloxy, C_6-C_{12}
 cycloalkylideneiminooxyalkyl, C_6-C_{12}
 10 dialkylideneiminooxyalkyl, $-S(O)_mR_1$, $-OS(O)_tR_1$,
 $-SO_2NR_2R_3$, $-CO_2R_4$, $-COR_5$, $-CONR_6R_7$, $-CSNR_8R_9$,
 $-NR_{10}R_{11}$, $-NR_{12}COR_{13}$, $-NR_{14}CO_2R_{15}$, $-NR_{16}CONR_{17}R_{18}$,
 $-PO(R_{19})_2$, $-Q$, $-ZQ_1$, $-(CR_{20}R_{21})_pQ_2$, $-Z(CR_{22}R_{23})_pQ_3$,
 $-(CR_{24}R_{25})_pZQ_4$, $-(CR_{26}R_{27})_pZ(CR_{28}R_{29})_qQ_5$,
 15 $-(CR_{30}R_{31})_pZ(CR_{32}R_{33})_qZ_1Q_6$, $-Z_2(CR_{34}R_{35})_p(C=Y)T$,
 $-Z_3(CR_{36}R_{37})_v(CR_{38}R_{39}=CR_{40}R_{41})(C=Y)T$;
 - B represents a D- $(R_x)_n$ group;
 - R represents a hydrogen atom, a linear or
 branched C_1-C_6 alkyl group, a linear or branched C_1-C_6
 20 haloalkyl group, a C_3-C_6 cycloalkyl group or a C_4-C_{12}
 cycloalkylalkyl group possibly substituted with
 halogen atoms or C_1-C_6 alkyl or C_1-C_6 thioalkyl or C_1-
 C_6 alkoxy or C_2-C_6 alkoxy carbonyl groups, alkenyl C_2-
 C_6 groups, alkynyl C_2-C_6 groups, the latter two
 25 groups, in turn, possibly substituted with halogen

atoms, a C₅-C₆ cycloalkenyl group possibly substituted with halogen atoms or C₁-C₆ alkyl groups, an aryl or arylalkyl group optionally substituted;

- R₁ and R₁₉, represent a C₁-C₆ alkyl or C₁-C₆ haloalkyl group, a C₃-C₆ cycloalkyl group, an aryl group optionally substituted by one or more substituents selected from halogen, NO₂, CN, CHO, linear or branched C₁-C₆ alkyl, linear or branched C₁-C₆ haloalkyl, linear or branched C₁-C₆ alkoxy, linear or branched C₁-C₆ haloalkoxy, C₁-C₆ alkylsulfonyl, C₂-C₆ alkoxy carbonyl;
- m is equal to 0, 1 or 2;
- t is equal to 1 or 2;
- R₂, R₃, R₆, R₇, R₈, R₉, R₁₀, R₁₁, R₁₇ and R₁₈, the same or different, represent a hydrogen atom, a linear or branched C₁-C₆ alkyl group in turn possibly substituted with halogen atoms, a C₁-C₆ alkoxy group, a C₃-C₆ cycloalkyl group, an arylalkyl group or an aryl group, said arylalkyl or aryl groups also optionally substituted with one or more substituents selected from halogen, NO₂, CN, CHO, linear or branched C₁-C₆ alkyl, linear or branched C₁-C₆ haloalkyl, linear or branched C₁-C₆ alkoxy, linear or branched C₁-C₆ haloalkoxy, C₁-C₆ alkylsulfonyl,

C_2 - C_6 alkoxy carbonyl or, together, represent a C_2 - C_5 alkylenic chain;

- R_4 , R_5 and R_{42} , represent a hydrogen atom, a linear or branched C_1 - C_6 alkyl group in turn possibly substituted with halogen atoms, a C_3 - C_6 alkenyl group in turn possibly substituted with halogen atoms, a Q_7 group, an arylalkyl group possibly substituted with one or more substituents selected from halogen, NO_2 , CN , CHO , linear or branched C_1 - C_6 alkyl, linear or branched C_1 - C_6 haloalkyl, linear or branched C_1 - C_6 alkoxy, linear or branched C_1 - C_6 haloalkoxy, C_1 - C_6 alkylsulfonyl, C_2 - C_6 alkoxy carbonyl;
- R_{12} , R_{14} and R_{16} , represent a hydrogen atom, a linear or branched C_1 - C_6 alkyl group in turn possibly substituted with halogen atoms, a C_3 - C_6 cycloalkyl group, a C_1 - C_6 alkoxy group, a C_1 - C_6 haloalkoxy group;
- R_{13} and R_{15} , represent a hydrogen atom, a linear or branched C_1 - C_6 alkyl group in turn possibly substituted with halogen atoms, a C_3 - C_6 alkenyl group, in turn possibly substituted with halogen atoms, a Q_7 group, NH_2 , $NHCN$, $NHNH_2$, $NHOH$, an arylalkyl group possibly substituted with one or more substituents selected from halogen, NO_2 , CN , CHO , linear or branched C_1 - C_6 alkyl, linear or branched C_1 - C_6 haloalkyl, linear or branched C_1 - C_6 alkoxy, linear or branched C_1 - C_6 haloalkoxy, C_1 - C_6 alkylsulfonyl, C_2 - C_6 alkoxy carbonyl;

C₆ haloalkyl, linear or branched C₁-C₆ alkoxy, linear or branched C₁-C₆ haloalkoxy, C₁-C₆ alkylsulfonyl, C₂-C₆ alkoxy carbonyl;

- R₂₀, R₂₁, R₂₂, R₂₃, R₂₄, R₂₅, R₂₆, R₂₇, R₂₈, R₂₉, R₃₀, R₃₁,

5 R₃₂, R₃₃, R₃₄, R₃₅, R₃₆, R₃₇, R₃₈, R₃₉, R₄₀ and R₄₁, the same or different, represent a hydrogen atom, a linear or branched C₁-C₆ alkyl group in turn optionally substituted with halogen atoms, a C₁-C₆ alkoxy group, or the two groups attached to the same

10 carbon atom can be joined to each other by C₂-C₅ alkylene groups, the alkylene groups can in turn be substituted with C₁-C₃ alkyl groups;

- Q, Q₁, Q₂, Q₃, Q₄, Q₅, Q₆ and Q₇ represent an aryl group, a C₃-C₆ cycloalkyl group, C₅-C₆ cycloalkenyl, a

15 heterocyclic group selected from triazolyl, triazolonyl, pyrazolyl, imidazolyl, imidazolylidinonyl, tetrazolyl, tetrazolonyl, isoxazolyl, furyl, thienyl, pyrrolyl, pyrrolidinyl, pyrrolidinonyl, pyridyl, pyrimidinyl, pyrimidinonyl, pyrazinyl, pyridazinyl,

20 oxazolyl, thiazolyl, oxadiazolyl, thiadiazolyl, isothiazolyl, benzoxazolyl, benzothiazolyl, isoxazolinyl, 1,3-dioxanyl, 1,4-dioxanyl, 1,3-dioxolanyl, tetrahydropyranyl, oxethanyl, oxyranyl, thiazolidinyl, oxazolidinyl, piperidinyl,

25 piperidinonyl, piperazinyl, morpholinyl, thiazinyl,

tetrahydrofuranyl, dioxazolyl,
tetrahydrofuroisoxazolyl, 2-oxa-3-
azabicyclo[3.1.0]hex-3-enyl,
said groups optionally substituted by one or more
5 substituents selected from halogen, NO₂, CN, CHO,
linear or branched C₁-C₆ alkyl, linear or branched C₁-
C₆ haloalkyl, linear or branched C₁-C₆ alkoxy, linear
or branched C₁-C₆ haloalkoxy, C₁-C₆ cyanoalkyl, C₂-C₆
alkoxyalkyl, C₂-C₆ alkylthioalkyl, C₂-C₆
10 alkylsulfinylalkyl, C₂-C₆ alkylsulfonylalkyl, C₂-C₆
haloalkoxyalkyl, C₂-C₆ haloalkylthioalkyl, C₂-C₆
haloalkylsulfinylalkyl, C₂-C₆ haloalkylsulfonylalkyl,
C₂-C₆ alkoxyalkoxy or C₂-C₆ haloalkoxyalkoxy
optionally substituted with a group selected from C₁-
15 C₄ alkoxy or C₁-C₄ haloalkoxy, C₂-C₆
alkylthioalkoxy, C₂-C₆ haloalkylthioalkoxy, C₃-C₁₂
dialkoxyalkyl, C₃-C₁₂ dialkylthioalkyl, C₃-C₁₂
dialkylthioalkoxy, C₃-C₁₂ dialkoxyalkoxy, C₂-C₆
haloalkoxyhaloalkoxy, C₃-C₁₀ alkoxyalkoxyalkyl, C₂-C₆
20 alkenyl, C₂-C₆ haloalkenyl, C₂-C₆ alkenyloxy, C₂-C₆
haloalkenyloxy, C₃-C₈ alkenyloxyalkoxy, C₃-C₈
haloalkenyloxyalkoxy, C₂-C₆ alkynyl, C₂-C₆
haloalkynyl, C₂-C₆ alkynylloxy, C₂-C₆ haloalkynylloxy,
C₃-C₈ alkynylloxyalkoxy, C₃-C₈ haloalkynylloxyalkoxy,
25 C₃-C₁₂ acylaminoalkoxy, C₂-C₈ alkoxyiminoalkyl, C₂-C₈

haloalkoxyiminoalkyl, C_3-C_8 alkenyloxyiminoalkyl, C_3-C_8
 haloalkenyloxyiminoalkyl, C_3-C_8
 alkynyloxyiminoalkyl, C_3-C_8 haloalkynyloxyiminoalkyl,
 C_5-C_{10} alkoxyalkynyloxy, C_6-C_{12}
 5 cycloalkylideneiminooxyalkyl, C_6-C_{12}
 dialkylideneiminooxyalkyl, aryl optionally substituted, $-S(O)_mR_1$, $-OS(O)_tR_1$, $-SO_2NR_2R_3$,
 $-CO_2R_4$, $-COR_5$, $-CONR_6R_7$, $-CSNR_8R_9$, $-NR_{10}R_{11}$,
 $-NR_{12}COR_{13}$, $-NR_{14}CO_2R_{15}$, $-NR_{16}CONR_{17}R_{18}$, $-PO(R_{19})_2$,
 10 $-Z_2(CR_{34}R_{35})_p(C=Y)T$, $-Z_3(CR_{36}R_{37})_v(CR_{38}R_{39}=CR_{40}R_{41})(C=Y)T$;
 - Z , Z_1 , $Z_2 = O$, $S(O)_r$;
 - $Y = O$, S ;
 - r is equal to 0, 1 or 2;
 - p , q are equal to 1, 2, 3 or 4;
 15 - v is equal to 0 or 1;
 - $Z_3 = O$, S or a direct bond;
 - T represents a hydrogen atom, a Z_4R_{42} group, a $-NR_{43}R_{44}$ group, an aryl group or a heterocyclic group selected from triazolyl, triazolonyl, pyrazolyl,
 20 imidazolyl, imidazolidinonyl, tetrazolyl, tetrazolonyl, pyrrolyl, pyrrolidinyl, pyrrolidinonyl, pyridyl, pyrimidinyl, piperidinyl, piperidinonyl, piperazinyl, morpholinyl, said groups optionally substituted by one or more substituents selected from
 25 halogen, NO_2 , OH , CN , CHO , linear or branched C_1-C_6

alkyl, linear or branched C₁-C₆ haloalkyl, C₃-C₆ cycloalkyl, C₅-C₆ cycloalkenyl, linear or branched C₁-C₆ alkoxy, linear or branched C₁-C₆ haloalkoxy, C₁-C₆ cyanoalkyl, C₂-C₆ alkoxyalkyl, C₂-C₆

5 alkylthioalkyl, C₂-C₆ alkylsulfinylalkyl, C₂-C₆ alkylsulfonylalkyl, C₂-C₆ haloalkoxyalkyl, C₂-C₆ haloalkylthioalkyl, C₂-C₆ haloalkylsulfinylalkyl, C₂-C₆ haloalkylsulfonylalkyl, -S(O)_mR₁;

- Z₄ = O, S or a direct bond;

10 - R₄₃ and R₄₄, the same or different, represent a hydrogen atom, a linear or branched C₁-C₆ alkyl group in turn optionally substituted with halogen atoms, a C₃-C₆ alkenyl group in turn optionally substituted with halogen atoms, a Q₇ group, an arylalkyl group

15 optionally substituted by one or more substituents selected from halogen, NO₂, CN, CHO, linear or branched C₁-C₆ alkyl, linear or branched C₁-C₆ haloalkyl, linear or branched C₁-C₆ alkoxy, linear or branched C₁-C₆ haloalkoxy, C₁-C₆ alkylsulfonyl,

20 C₂-C₆ alkoxy carbonyl, or they jointly represent a C₂-C₅ alkylene chain;

- D represents:

a heterocyclic group of the heteroaryl or heterocyclic type, in all the above cases the

25 heterocycle can be mono or polycyclic and can be

connected to the rest of the structure either through one of its carbon atoms or, when possible, through one of its nitrogen atoms;

or it represents a mono or polycyclic aryl group, in 5 this latter case, the group can also be partially saturated;

- R_x represents a substituent selected from hydrogen, halogen, NO_2 , CN , CHO , OH , linear or branched C_1-C_6 alkyl, linear or branched C_1-C_6 haloalkyl, linear or 10 branched C_1-C_6 alkoxy, linear or branched C_1-C_6 haloalkoxy, C_1-C_6 cyanoalkyl, C_2-C_6 alkoxyalkyl, C_2-C_6 alkylthioalkyl, C_2-C_6 alkylsulfinylalkyl, C_2-C_6 15 alkylsulfonylalkyl, C_2-C_6 haloalkoxyalkyl, C_2-C_6 haloalkylthioalkyl, C_2-C_6 haloalkylsulfinylalkyl, C_2-C_6 haloalkylsulfonylalkyl, C_2-C_6 alkoxyalkoxy or C_2-C_6 20 haloalkoxyalkoxy optionally substituted with a group selected from C_1-C_4 alkoxy or C_1-C_4 haloalkoxy, C_2-C_6 alkylthioalkoxy, C_2-C_6 haloalkylthioalkoxy, C_3-C_{12} dialkoxyalkyl, C_3-C_{12} 25 dialkylthioalkyl, C_3-C_{12} dialkylthioalkoxy, C_3-C_{12} dialkoxyalkoxy, C_2-C_6 haloalkoxyhaloalkoxy, C_3-C_{10} alkoxyalkoxyalkyl, C_2-C_6 alkenyl, C_2-C_6 haloalkenyl, C_2-C_6 alkenyloxy, C_2-C_6 haloalkenyloxy, C_3-C_8 alkenyloxyalkoxy, C_3-C_8 haloalkenyloxyalkoxy, C_2-C_6 30 alkynyl, C_2-C_6 haloalkynyl, C_2-C_6 alkynyloxy, C_2-C_6

haloalkynyloxy, C₃-C₈ alkynyloxyalkoxyl, C₃-C₈

haloalkynyloxyalkoxyl, C₃-C₁₂ acylaminoalkoxy, C₂-C₈

alkoxyiminoalkyl, C₂-C₈ haloalkoxyiminoalkyl, C₃-C₈

alkenyloxyiminoalkyl, C₃-C₈ haloalkenyloxyiminoalkyl,

5 C₃-C₈ alkynyloxyiminoalkyl, C₃-C₈

haloalkynyloxyiminoalkyl, C₅-C₁₀ alkoxyalkynyloxy,

C₆-C₁₂ cycloalkylideneiminoxyalkyl, C₆-C₁₂

dialkylideneiminoxyalkyl, -S(O)_mR₁, -OS(O)_tR₁,

-SO₂NR₂R₃, -CO₂R₄, -COR₅, -CONR₆R₇, -CSNR₈R₉,

10 -NR₁₀R₁₁, -NR₁₂COR₁₃, -NR₁₄CO₂R₁₅, -NR₁₆CONR₁₇R₁₈,

-PO(R₁₉)₂, -Q, -ZQ₁, -(CR₂₀R₂₁)_pQ₂, -Z(CR₂₂R₂₃)_pQ₃,

-(CR₂₄R₂₅)_pZQ₄, -(CR₂₆R₂₇)_pZ(CR₂₈R₂₉)_qQ₅,

-(CR₃₀R₃₁)_pZ(CR₃₂R₃₃)_qZ₁Q₆, -Z₂(CR₃₄R₃₅)_p(C=Y)T,

-Z₃(CR₃₆R₃₇)_v(CR₃₈R₃₉=CR₄₀R₄₁)(C=Y)T;

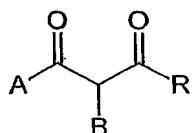
15 if several R_x groups are present, these can be the same or different;

- n = 1-9;

and of the relevant salts which have agronomical compatibility, as herbicides.

20 4. Use according to claim 3, for the control under pre-emergence and post-emergence of monocotyledon and dicotyledon weeds.

5. Use of derivatives of 1,3-diones having general formula (I):



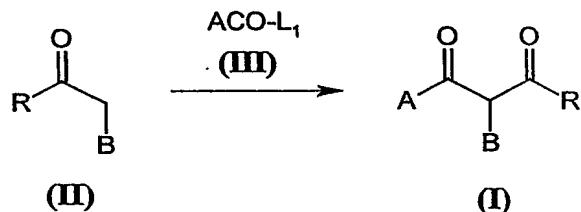
(I)

wherein:

5 - A, B and R have the meanings defined according to claim 3, and of the relevant salts pharmaceutically acceptable as medicaments.

6. A process for the preparation of the compounds having general formula (I) according to any 10 of the claims 1 to 3, characterized in that it includes a reaction of a carbonyl compound having general formula (II) with a compound having general formula (III), according to the reaction scheme 1

Scheme 1:



15

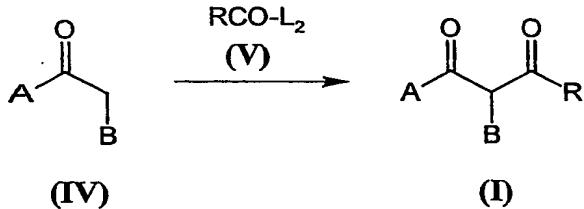
wherein

- A, B and R have the meanings previously defined;

- L_1 represents a suitable leaving group such as, for example, a halogen atom, a CN group, an imidazol-20 1-yl group, an R_1O^- group wherein R_1 represents a C_1-C_4 alkyl group or a phenyl group optionally

substituted, or it represents an $R_{L1}COO-$ group wherein R_{L1} represents a hydrogen atom, a C_1-C_4 alkyl or haloalkyl group, a phenyl group optionally substituted or an A group.

5 7. The process for the preparation of the
compounds having general formula (I) according to any
of the claims 1 to 3, characterized in that it
includes a reaction of a carbonyl compound having
general formula (IV) with a compound having general
10 formula (V), according to the reaction scheme 2

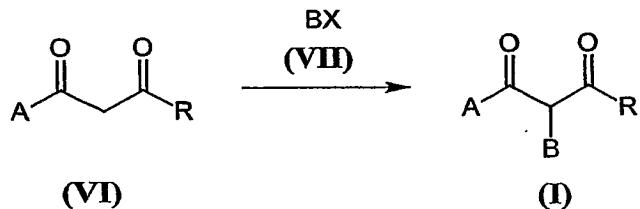


wherein

- A, B and R have the meanings previously defined;
- L_2 represents a suitable leaving group such as,
15 for example, a halogen atom, a CN group, an imidazol-1-yl group, an $R_L O^-$ group wherein R_L represents a C_1-C_4 alkyl group or a phenyl group optionally substituted, or it represents an $R_{L1} COO^-$ group wherein R_{L1} represents a hydrogen atom, a C_1-C_4 alkyl group or haloalkyl group, a phenyl group optionally substituted or an R group.
20

8. The process for the preparation of the compounds having general formula (I) according to any of the claims 1 to 3, characterized in that it includes a reaction of a 1,3-dicarbonyl compound 5 having general formula (VI) with a compound having general formula (VII), according to the reaction scheme 3

Scheme 3:



wherein

10 - A, B and R have the meanings previously defined;

- X represents a halogen atom, an $\text{R}_{\text{L}2}\text{SO}_2\text{O}^-$ group, wherein $\text{R}_{\text{L}2}$ represents a $\text{C}_1\text{-C}_4$ alkyl or haloalkyl group, a phenyl group optionally substituted by $\text{C}_1\text{-C}_4$ alkyl groups, or it represents an $\text{R}_{\text{L}3}\text{SO}_2^-$ group,

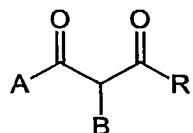
15 wherein $\text{R}_{\text{L}3}$ represents a $\text{C}_1\text{-C}_4$ alkyl or haloalkyl group.

9. The process according to any of the claims from 6 to 8, characterized in that the reaction is carried out in the presence of one or more inert 20 organic solvents and in the presence of an organic or

inorganic base, at a temperature ranging from -80°C to the boiling temperature of the reaction mix.

10. The process according to claim 9, characterized in that the reaction is carried out in
5 two separate phases.

11. A method for the control of weeds in agricultural crops, by the application of compounds having general formula (I):



10

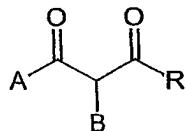
(I)

wherein:

- A, B and R have the meanings according to claim
15 3.

12. The method according to claim 11, characterized in that the quantity of compound having formula (I) to be applied ranges from 1 g to 4,000 g per hectare.

20 13. Herbicidal compositions containing, as active principle, one or more compounds having general formula (I):



(I)

wherein:

5 - A, B and R have the meanings according to claim 3, possibly also as a blend of tautomers and/or isomers.

14. The herbicidal compositions according to claim 13, including other active principles 10 compatible with the compounds having general formula (I), such as other herbicides, fungicides, insecticides, acaricides, fertilizers, etc..

15. The herbicidal compositions according to claim 14, characterized in that the additional 15 herbicides are selected from:

acetochlor, acifluorfen, aclonifen, AKH-7088, alachlor, aloxydim, ametryn, amicarbazone, amidosulfuron, amitrole, anilofos, asulam, atrazine, azafenidin, azimsulfuron, aziprotryne, BAS 670 H, BAY 20 MKH 6561, beflubutamid, benazolin, benfluralin, benfuresate, bensulfuron, bensulide, bentazone, benzfendizone, benzobicyclon, benzofenap, benzthiazuron, bifenox, bilanafos, bispyribac-sodium, bromacil, bromobutide, bromofenoxim, bromoxynil,

butachlor, butafenacil, butamifos, butenachlor,
butralin, butroxydim, butylate, cafenstrole,
carbetamide, carfentrazone-ethyl, chlomethoxyfen,
chloramben, chlorbromuron, chlorbufam, chlorflurenol,
5 chloridazon, chlorimuron, chlornitrofen,
chlorotoluron, chloroxuron, chlorpropham,
chlorsulfuron, chlorthal, chlorthiamid, cinidon
ethyl, cinmethylin, cinosulfuron, clethodim,
clodinafop, clomazone, clomeprop, clopyralid,
10 cloransulam-methyl, cumyluron (JC-940), cyanazine,
cycloate, cyclosulfamuron, cycloxydim, cyhalofop-
butyl, 2,4-D, 2,4-DB, daimuron, dalapon, desmedipham,
desmetryn, dicamba, dichlobenil, dichlorprop,
dichlorprop-P, diclofop, diclosulam, diethatyl,
15 difenoxuron, difenzoquat, diflufenican,
diflufenzopyr, dimefuron, dimepiperate, dimethachlor,
dimethametryn, dimethenamid, dinitramine, dinosseb,
dinoseb acetate, dinoterb, diphenamid, dipropetryn,
diquat, dithiopyr, 1-diuron, eglinazine, endothal,
20 EPTC, espropcarb, ethalfluralin, ethametsulfuron-
methyl, ethidimuron, ethiozin (SMY 1500),
ethofumesate, ethoxyfen-ethyl (HC-252),
ethoxysulfuron, etobenzanid (HW 52), fenoxaprop,
fenoxaprop-P, fentrazamide, fenuron, flamprop,
25 flamprop-M, flazasulfuron, florasulam, fluazifop,

fluazifop-P, fluazolate (JV 485), flucarbazone-sodium, fluchloralin, flufenacet, flufenpyr ethyl, flumetsulam, flumiclorac-pentyl, flumioxazin, flumipropin, fluometuron, fluoroglycofen,
5 fluoronitrofen, flupoxam, fluproanate, flupyralsulfuron, flurenol, fluridone, flurochloridone, fluroxypyr, flurtamone, fluthiacet-methyl, fomesafen, foramsulfuron, fosamine, furyloxyfen, glufosinate, glyphosate, halosulfuron-methyl, haloxyfop,
10 haloxyfop-P-methyl, hexazinone, imazamethabenz, imazamox, imazapic, imazapyr, imazaquin, imazethapyr, imazosulfuron, indanofan, iodosulfuron, ioxynil, isopropalin, isoproturon, isouron, isoxaben, isoxachlortole, isoxaflutole, isoxapryifop, KPP-421,
15 lactofen, lenacil, linuron, LS830556, MCPA, MCPA-thioethyl, MCPB, mecoprop, mecoprop-P, mefenacet, mesosulfuron, mesotrione, metamitron, metazachlor, methabenzthiazuron, methazole, methoprottryne, methyldymron, metobenzuron, metobromuron,
20 metolachlor, S-metolachlor, metosulam, metoxuron, metribuzin, metsulfuron, molinate, monalide, monolinuron, naproanilide, napropamide, naptalam, NC-330, neburon, nicosulfuron, nipyrapclofen, norflurazon, orbencarb, oryzalin, oxadiargyl,
25 oxadiaxon, oxasulfuron, oxaziclofone, oxyfluorfen,

paraquat, pebulate, pendimethalin, penoxsulam,
pentanochlor, pentozazone, pethoxamid, phenmedipham,
picloram, picolinafen, piperophos, pretilachlor,
primisulfuron, prodiame, profluazol, proglazine,
5 prometon, prometryne, propachlor, propanil,
propaquizafop, propazine, propham, propisochlor,
propyzamide, prosulfocarb, prosulfuron, pyraclonil,
pyraflufen-ethyl, pyrazogyl (HAS-961), pyrazolynate,
pyrazosulfuron, pyrazoxyfen, pyribenzoxim,
10 pyributicarb, pyridafol, pyridate, pyriftalid,
pyriminobac-methyl, pyrithiobac-sodium, quinclorac,
quinmerac, quizalofop, quizalofop-P, rimsulfuron,
sethoxydim, siduron, simazine, simetryn, sulcotriione,
sulfentrazone, sulfometuron-methyl, sulfosulfuron,
15 2,3,6-TBA, TCA-sodium, tebutam, tebuthiuron,
tepraloxydim, terbacil, terbumeton, terbutyl-azine,
terbutryn, thenylchlor, thiazafluron, thiazopyr,
thidiazimin, thifensulfuron-methyl, thiobencarb,
tiocarbazil, tioclorim, tralkoxydim, tri-allate,
20 triasulfuron, triaziflam, tribenuron, triclopyr,
triethylazine, trifloxysulfuron, trifluralin,
triflusulfuron-methyl, tritosulfuron, UBI-C4874,
vernolate.

16. The compositions according to any of the claims 13-15, characterized in that the concentration of active substance ranges from 1 to 90%.